

## REMARKS

This Response is submitted in reply to the final Office Action mailed on June 18, 2008. A one-month extension of time fee is submitted herewith. The Commissioner is hereby authorized to charge any other fees that may be required or credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 115808-520 on the account statement.

Claim 9 is pending in this application. Claims 1-8 and 10-48 were previously canceled. In the Office Action, Claim 9 is rejected under 35 U.S.C. §103. For at least the reasons set forth below, Applicants respectfully submit that the rejection should be withdrawn.

In the Office Action, Claim 9 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. 6,156,355 to Shields, Jr. et al. ("*Shields*") in view of U.S. 6,524,574 to Spangler et al. ("*Spangler*") and U.S. 3,946,123 to Hanna ("*Hanna*"). Claim 9 recites a nutritionally complete pet food comprising an ingestible carrier having 1) at least one component selected from the group consisting of a probiotic lactic acid bacterium, a culture supernatant of a probiotic lactic acid bacterium, and combinations thereof, present in an amount of at least  $10^5$  cfu/g, 2) at least one yeast present in an amount of at least  $10^5$  cfu/g, and 3) at least one synthetic or natural carotenoid with or without provitamin A activity present in an amount of from about  $10^{-12}\%$  to 20% by weight. Applicants believe this rejection is improper and respectfully traverse it for at least the reasons set forth below.

One of ordinary skill in the art would have no reason to combine the cited references because the cited references are non-analogous art. *Shields* is entirely directed to pet food formulations designed to accommodate the unique needs of pets within various breed groups taking into account both the genetic diversity and food allergies of different dog breeds. See, *Shields*, column 3, lines 20-36. The probiotics of *Shields* are utilized in pet food formulations for breeds with gastrointestinal immune deficiency problems to aid in digestion. See, *Shields*, column 11, lines 18-21 and 59-67; column 12, lines 1-7; column 14, lines 38-52. Similarly, *Spangler* is entirely directed to probiotics that are used to inhibit the colonization of certain bacteria in the intestines of humans and animals. See, *Spangler*, column 3, lines 3-7. Rather than teaching a composition that produces a photoprotective effect on the skin of animals,

*Shields* and *Spangler* are wholly directed to the use of probiotics to create a digestive effect in the intestine of the animal. The specification expressly distinguishes the claimed invention from prior art disclosures in which probiotics were reported to exert their effect in the intestine. See, specification, page 5, lines 9-19. Further, *Hanna* is directed to a canned pet food composition containing a cereal product in a palatable form to produce a chunky pet food product. See, *Hanna*, column 1, lines 6-9 and 56-58. Like *Shields* and *Spangler*, *Hanna* fails to address the problem of protecting an animal's skin against ultraviolet-related stress. Thus, the cited references are non-analogous art.

The Examiner alleges that the cited references are analogous art because all three references are directed to nutritionally complete pet foods. See, Office Action, page 6, lines 1-3. Applicants respectfully disagree and submit that the appropriate field of Applicants' endeavor includes pet food compositions for skin photoprotection as described in the title of the invention, rather than the broad category of "nutritionally complete pet foods." As such, the cited references are non-analogous art, and a skilled artisan would have no reason to combine the cited references to arrive at the present claims.

Moreover, the combination of cited references is not obvious because the claimed combination of ingredients produces the unexpected result of an enhanced synergistic photoprotective effect on the skin. See, specification, page 5, lines 6-8 and 17-19. Applicants have surprisingly discovered that probiotics produce an effect in an individual's body at a location distant from the region in which they colonize it. See, specification, page 5, lines 16-17. Specifically, a pet food including the claimed ingredients in an ingestible carrier produces the unexpected result of an enhanced synergistic photoprotective effect on the skin. See, specification, page 5, lines 6-8 and 17-19.

The Examiner alleges that the cited references render the present claims obvious absent a showing of unexpected results. See, Office Action, page 4, lines 6-7. However, the specification states explicitly that "[t]he combination according to the present invention has a particular beneficial effect on skin protection and colouration of the skin, that helps to reduce the effects of ultraviolet-related stress on skin." See, specification, page 4, lines 23-25. In fact, "it has now surprisingly and unexpectedly been determined that admixture of these very specific constituents [of the present claims] elicits an enhanced effect or response in respect of the photoprotection of

the skin." See, specification, page 5, lines 6-8. Specifically, the composition is effective to protect the skin of pets against radiations such as such as ultraviolet and all skin related skin disorders such as, for example, erythema, inflammation, sunburn, barrier function, photoaging and alteration of the immune system. See, specification, page 4, lines 11-16.

Until the present invention, probiotics were only reported to produce beneficial effects in the intestine (*see*, for example, cited references *Shields* and *Spangler*), or the area in which they colonize an individual's body. See, specification, page 5, lines 9-15. As a result, Applicants respectfully submit that one of ordinary skill in the art would not reasonably expect that a combination of the cited references would produce any effect outside the intestine of an animal. Accordingly, the present claims are not obvious because the claimed combination produces an unexpected photoprotective effect.

Applicants submit, therefore, that the cited references are not combinable and that the presently claimed food produces unexpected results not taught or suggested by the cited art. Applicants respectfully request that the obviousness rejection of Claim 9 be withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit and early allowance of same.

Respectfully submitted,

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